

UHF调频中继台

**BJ-851**

**使用说明书**

**鸣谢!**

感谢您惠购 **BAOJIE** 双工中继台。我们相信本编程方便的中继台将在您的通讯系统中有效的发挥作用，获得最高的操作效率。**BAOJIE** 公司对所有的产品采用了最先进的技术，我们深信本产品的质量和功能将会使您感到满意。

## 用户须知

- 不得使用本装置淋雨或者受潮，以免发生火灾或者触电。
- 在任何情况下都不得拆开本装置，以免发生触电。
- 不得将本装置长时间暴露在直射阳光下，或者放置在加热设备的附近。
- 不得将本装置放置在灰尘多和/或湿度极高的环境中，也不得放置在不平稳的表面。
- 当发现从本装置发出异味或者冒烟时，应立即切断本装置的电源，并且与当地的宝捷服务中心或者经销商联系。

## ! 安全性

- ◆ 政府法规规定禁止在政府管辖地区范围内未经许可使用无线电发射机
- ◆ 非法使用将受到罚款或者拘留，或者二者并罚。
- ◆ 只能由有资格的技术人员进行维修。

## 开箱及检查设备

小心打开中继台的包装盒。在丢弃包装材料之前，建议您按照以下表中的物品进行核对。如果有任何的项目在运输中丢失或者损坏，请立即向运送单位提交索赔书。

物品	数量
支架	1
螺丝	1
851专用写频线	1
AC/DC电源	1
使用说明书	1

## 特性

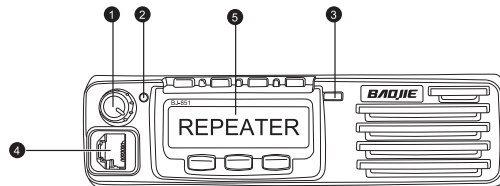
- 在电脑上使用编程软件，可以方便地进行信道数据编程。
- 在使用PF键或者外部控制线，可以呼出16个预设的信道的其中之一。(使用于BJ-851B型)
- 可以将CTCSS/DCS信令编程到各个信道，并且可以同时编解CTCSS/DCS音频。  
BJ-851：宽带：25kHz 窄带：12.5kHz (使用于BJ-851B型)
- 可以通过电脑编程软件调整以下功能：
- 接收 频率  
发射 频率  
设置CTCSS/DCS

## 安装方法

将支架安装到中继台的前面板上，使得支架对准前面板上的孔，然后使用随机提供的螺丝固定。

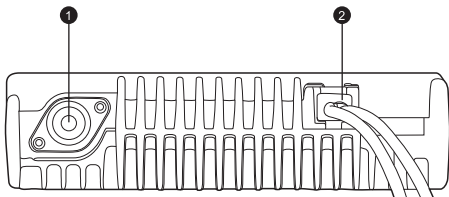
有关中继台和天线的安装，请与当地的经销商商谈。

## 前面板



- ① 开关按钮控制  
用于打开 / 关闭中继台电源
- ② 电源指示灯  
当电源从DC13.8V插座供电时，点亮红灯。
- ③ 接收指示灯：  
当接收到信号时，点亮绿灯。
- ④ 麦克风插座 / 写频线接口  
将麦克风接连至本8脚模件插座（适用于851B型）。
- ⑤ Repeater 字样指示灯：  
接收信号绿灯指示，发射信号红灯指示。

## ■ 后面板



### ① TX OUT插座

将TX天线或者双工器连接至本BNC插座

### ② DC 13.8V插座

将13.8V DC电源连接至本插座。

## 中继台的操作

注：

有关中继台的编程，请与当地的经销商商谈。

当本装置接通电源后，按下开关按钮1秒钟电源指示灯点亮，再按此键一次进入中继状态，此时中继绿灯点亮。

技术规格：

整体部分	
频率范围：	400-470 MHz
收发频差：	10MHz
调制方法：	FM 16F3
工作电压：	12-14V
待机电流：0.3A 接收电流：0.8A 发射电流：≤3A	
频稳度：	±2.5 PPM
频率间隔：	12.5KHz/25KHz
重量：	大约2kg
最大输出功率(w)：	10W
接收插入损耗(dB)：	≤2dB
发射插入损耗(dB)：	<1.5dB
发射-接收 隔离度(dB)	≥65dB
最大电压驻波比：	1.5
工作温度：	-30-----+60℃
阻抗：	50Ω

接收	
单工灵敏度:	$\geq 0.3\mu\text{v}(12\text{dB SINAD})$
双工灵敏度:	$< 3\text{dB}$
静噪灵敏度:	$\geq 0.2\mu\text{v}$
领道选择性:	75dB
杂散及镜像抑制:	85dB
互调抗扰性:	72dB
剩余噪声:	-45dB
去加重频程:	$6 \pm 3\text{dB}$
音频输出功率:	2.0W
音频失真:	$< 5\%$
工作模式:	接收模式
发射	
输出功率:	5-10W
杂散辐射:	75dB
互调:	-45dB
音频失真:	$< 5\%$
最大调制:	5KHZ
预加重频率:	$6 \pm 3\text{dB}$
工作模式:	发射模式
领道选择性:	75dB

CPU 控制器	
接收发射频率设置	
自动中继台设置	
PC 编程	
模拟哑音和数字哑音设置	

# UHF FM REPEATER BJ-851 INSTRUCTION MANUAL

## Gratitude!

Thanks a lot for choosing **BAOJIE** Duplex Repeater. It adopts advanced technology and we believe that the exquisite designation will make it service your lives better and easier. To use the repeater correctly, please read the instruction carefully before using it.

### PRECAUTIONS

- Do not expose the repeater to rain or moisture; to prevent fire or electric shock.
- Do not take apart the repeater under any circumstances; to avoid risk of electric shock.
- Do not put the repeater in the sun too long time or near the heated device .
- Do not place the repeater in excessively dusty and/or humid areas, nor on unstable surfaces.
- If you detect an abnormal odor or smoke coming from the repeater, disconnect the power from the repeater immediately, and to contact Baojie service center or dealer.

### ! Safety Notice

- ◆ GOVERNMENT LAW PROHIBITS THE OPERATION OF UNLICENSED WIRELESS TRANSMITTERS WITHIN THE TERRITORIES UNDER GOVERNMENT CONTROL.
- ◆ ILLEGAL OPERATION IS PUNISHABLE BY FORFEIT OR IMPRISONMENT OR BOTH.
- ◆ MAINTENANCE SERVICE OF REPEATER TO QUALIFIED TECHNICIANS ONLY.

## Packing Inspection

Welcome to use BJ-851 Repeater. Before using it , we advise you:

1. Please check whether there is a damage on the pack.
2. Please open the pack carefully and make sure if there are the things listed on the following chart. If you find the product and the accessories were lost or damaged, please contact with our authorized dealers at once.

Item	Quantity
Mounting bracket	1
Screw set	1
AC/DC power	1
Programming cable	1
Instruction manual	1

## FEATURES

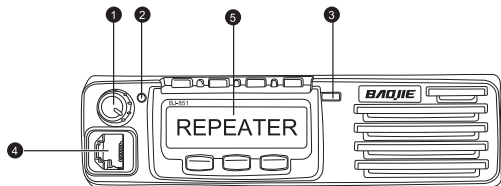
- You can easily program channel data using the programming software on a PC.
- You can recall one of the 16 preset channels using a PF key or the external control wire. (using BJ-851B mode)
- CTCSS/DCS signaling can be programmed on each channel by programming software. The same time it can be decode up to 16 different CTCSS/DCS tone
- The repeater Bandwidth: Wide: 25kHz /Narrow: 12.5kHz (using BJ-851B mode)
- Adjust the following functions by programming software:  
Setting RX frequency  
Setting TX frequency  
Setting CTCSS/DCS

**Basic Operation**

Please operate mounting bracket to the front panel of repeater.  
Match each holes on the mounting bracket, then use the screws set to fix them.

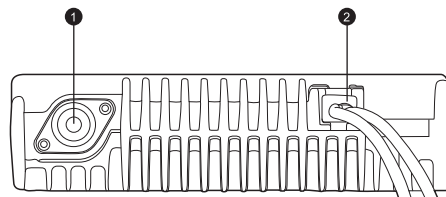
Please contact **BAOJIE** dealer for operating antenna.

■ FRONT PANEL



- ① **Power ON/OFF knob:**  
Turn on/off power switch
- ② **Power indicator:**  
Lights red when power is applied from the DC 13.8V jack.
- ③ **Recive indicator:**  
the light green while receiving signal.
- ④ **Programming cable port**
- ⑤ **"REPEATER" indicator:**  
the "REPEATER" green while receiving signal,the "REPEATER" red while transmitting signal.

■ REAR PANEL



- ① **TX OUT port**  
Connect a TX antenna or a duplexer to this receptacle.
- ② **DC 13.8V port**  
Connect a 13.8V DC power supply to this port.



## REPEATER OPERATION

Note:

Please contact Baojie dealer for programming the repeater.

When power is applied to the repeater, the power indicator lights when you press power knob for 1 second. The repeater mode when press power knob again, and "REPEATER" light green.

## TECHNICAL SPECIFICATIONS

## General

Frequency Range:	400-470 MHZ
Frequency Spacing:	10MHZ
Duplex Band Width:	1MHZ
Modulation Type:	FM 16F3
Operating Voltage:	12-14V
standby Current:0.3A/ Rx current : 0.8A /Tx current: ≤3.0A	
Frequency Stability:	± 2.5 PPM
Channel Spacing:	12.5KHZ/25KHZ
Weight:	Approx 2kg
Max Output Power (W):	10W
Receiving End Insertion loss (dB):	≤2dB
Transmitting End Insertion loss(dB):	<1.5dB
Transmitting-Receiving End Isolation (dB)	≥65dB

Max VSWR:	1.5
Operating Temperature:	-30-----+60℃
Frequency Stability:	Approx 2.5ppm/℃
Matched Impedance:	50Ω
Receiver	
Simplex Sensitivity:	≥0.3uv(12dB SINAD)
Duplex Sensitivity:	<3dB
Squelch Sensitivity	≥0.2uv
Adjacent channel selectivity:	75dB
Inter-modulation Rejection:	72dB
Residual Noise:	-45dB
DEMP FO:	6 ± 3dB
Audio Output Power:	2.0W
Audio Distortion:	<5%
Working Mode:	receiving mode
Transmitter	
Output Power:	5-10W
Spurious Radiation:	75dB
Residual Modulation:	-45dB
Audio Distortion:	<5%
Max Modulation:	5KHZ
Pre-emphasis Frequencies:	6 ± 3dB
Working Mode:	Transmitting Mode

**CPU controller**

Receiving-Transmitting Frequency Setting

Automatic Repeater Setting

PC Programming

CTCSS and DCS